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U.S. DEPARTMENT OF AGRICULTURE RURAL DEVELOPMENT RURAL UTILITIES SERVICE

Statement of Thomas C. Dorr, Under Secretary, Rural Development, before the Committee on Agriculture.

Mr. Chairman, Members of the Committee, I appreciate the opportunity to come before this committee to testify, on behalf of the U.S. Department of Agriculture, on the benefits that Rural Development's Distance Learning and Telemedicine program brings to rural Americans as well as the ways in which this program could be improved.

The building and delivery of an advanced telecommunications network is having a profound effect on our nation's economy, its strength, and its growth. In particular, these networks are becoming increasingly more important to rural America in terms of their ability to help solve two very important issues facing the nation today. Number one, President Bush's initiative of "leaving no child behind" is addressed by providing them with the best education this country has to offer, whether they live in Washington, DC, or Almena, Kansas. The second is the delivery of quality and affordable health care.

Over 63 million people call rural America home. There are 2,300 counties in rural America, covering 80 percent of the nation's landmass. In urban and suburban America, abundant resources enable our students and citizens to benefit from access to

advanced medical treatment and new educational opportunities. However, demographics should not define degrees of opportunity, prosperity, and well being.

USDA's Distance Learning and Telemedicine program, administered by Rural Development through its Rural Utilities Service, continues its charge to improve educational and health care delivery in rural America. The terms "distance learning" and "telemedicine" are becoming synonyms for "opportunity" and "hope."

Telemedicine projects are providing new and improved health care services beginning with patient diagnosis, through surgical procedures, and post-operative treatment. New advancements are being made in the telepharmaceutical and telepsychiatry arenas providing health care options never before available to many medically under-served, remote, rural areas.

Distance learning projects continue to provide funding for computers and Internet connection in schools and libraries. The vast array of study options available to rural students through distance learning technologies literally brings the world to their doorstep.

The value of these services to rural parents, teachers, doctors and patients is immeasurable. And, in rural America, they play a vital role in solving the problems created by time, distance, location, and lack of resources. Distance learning and telemedicine services that can be deployed over broadband networks are literally

changing the landscape of rural America. They enable rural students to take virtual field trips to places all over the world, from historic Williamsburg to the Louvre in Paris. They provide life saving medical treatment over telemedicine networks – allowing for specialists to guide surgeries hundreds of miles away! And there are real economic benefits as well. Building on advanced telecommunications platforms, distance learning and telemedicine technologies are not only improving the quality of life in rural areas, but they are also making direct contributions to the economies in rural areas by introducing the skills needed for a high-tech workforce and promoting sound health care practices, including preventative care initiatives. Direct contributions are made to economic growth and the creation of new markets — where businesses prosper and grow locally, while competing nationally and globally over high-speed networks and inter-connecting with suppliers, manufacturers, and consumers to optimize business strategies.

To further the success of this valuable program, we must be in a position to utilize the technology driving competition. USDA must continue its efforts to build this critical infrastructure component that supports this much needed technology for the residents of rural America. Rural America has a lot to offer. It offers open spaces, a commitment to traditional values, and the potential for an overall improved quality of life. With the right tools and infrastructure, rural citizens can have the best of both worlds – the advantages of living in a rural area and the opportunities to benefit from strong economies, state of the art educational resources, and second to none medical treatment.

The results of this program are real and immediate! Hundreds of success stories occur each year due to the Federal government's commitment to the people of rural America to become partners in helping them help themselves. Consider the following. With the deployment of advanced communications technologies to isolated health care centers, local communities can eliminate the barriers of distance, remoteness, and time that face rural physicians and patients. This was the case for a young woman, living in a small Kansas community and facing a life-time of treatments to control her diabetes. With telemedicine, "on-line" care has virtually eliminated the time consuming physical visits to the doctor for treatment. For her, this means leading a "normal" life, where her valuable time is spent building a career and enjoying life's many other challenges, instead of building a life around her disease.

In another example, we can see how telemedicine plays a role from the beginning of a person's life. Dheva (Dee-va) Muthuramalingam (Moo-too-ra-ma-ling-am) was born in a small community hospital in West Virginia on December 30, 1999, with respiratory problems and a heart murmur. As a precautionary measure, and as the world stepped into the new millennium, on January 1, 2000, he was transferred to the Winchester Medical Center for further diagnosis. Dheva was seen by an adult cardiologist. As is often the case in rural areas, the proper specialist is not always available. While the doctor determined that Dheva had a hole in his heart -- he was also exhibiting other symptoms not associated with the initial diagnosis and further expertise was required. Hence, plans were made to transfer Dheva to the University of Virginia Hospital for further testing. Fortunately, before transfer, the doctor at UVa had the ability to review

his ultrasound transmitted via telemedicine and diagnosed a rare congenital heart defect requiring immediate medication BEFORE transfer! Medication was prescribed and the local Medical Center was able to stabilize Dheva for safe transport. The doctors believed Dheva would not have survived the trip if the telemedicine diagnosis had not been made.

Dheva successfully underwent surgery the next day. He is a happy, living testament to the benefits of telemedicine consult and diagnosis, and the ability to delivery life saving medicine from hundreds of miles away.

Or consider, all across the country, rural school systems and high schools like this one, Quitman High School in Mississippi, that provide dual benefits to the community through the deployment of distance learning services. During school hours, three remote school districts are linked together to share valuable teacher resources and provide interactive curriculum, including foreign languages like Spanish I and advanced courses in subjects like Oral Communications. After hours, when the schools are not using the system, it serves as a community resource tool, available to the residents for other life-long learning opportunities. When we bring this technology to the schools, in many instances, we are bringing it and its benefits to the entire community. For instance public health and safety officials often use a school's distance learning facilities to take "re-certification" training.

While our focus here today is on the benefits of distance learning and telemedicine services, in reality, the benefits often spill over into the local community and foster a better understanding of the power of the world-wide web – at home, in the office, at the factory, on the farm, as well as at schools, hospitals, and rural health clinics. Using the home computer a farmer bought to "log-on" and run his business, from tracking weather patterns to buying and selling commodities on the open market, helps him to participate in the global, digital economy where he must compete. His spouse, a school teacher, attends college in the evening to receive her degree in working with children with special education needs. This just another example of the synergism these advanced technologies create.

These are truly remarkable stories that this partnership – USDA and rural America – helps to make real everyday. Today's advanced telecommunications networks will allow rural communities to become platforms of opportunity for new businesses to compete locally, nationally, and globally and the Distance Learning and Telemedicine Program is an important component to help us continue to meet the "new communications needs" of rural America and ensure that no rural resident – from students to parents and teachers, from patients to doctors, or from consumers to entrepreneurs – will be left behind in this new century.

There are many challenges before us. But, as has been shown over and over again, given the right tools and relationships, rural citizens will take the reins and bridge the digital divide and will harness the opportunities for a higher quality of life. Providing

rural residents and businesses with barrier-free access to the benefits of today's technology will bolster the economy and improve the quality of life in rural America. Much has been accomplished upon this successful public/private partnership. In the 10 years this program has been providing funding, \$173 million has been made available to fund over 500 projects in 45 states and four territories.

While this is a tremendous amount of investment – which leverages private and local investment as well – more can be accomplished. We are constantly reviewing the program from an administrative viewpoint to see where improvements can be made within the legislative boundaries in which we operate. Most recently, we reduced the matching requirement to enable more schools and hospitals, particularly those from the most remote communities to benefit.

One critical impediment currently exists to funding certain telemedicine services on tribal reservations. In many instances, the health care facilities on reservations are owned by the Indian Health Services (IHS). Since IHS facilities are considered "federal" facilities, these clinics are not eligible for RUS DLT grant funding. Therefore, many Native Americans will not be able to benefit from the improved health care opportunities that the DLT grants enable without legislative amendments that will enable such funding.

In its 10 years of operations, it is clear that the demand for loans in this program is very small. Only 10 percent of the total investment has been in the form of loans. This is

primarily due to the types of entities that are eligible to borrow – namely schools and health care providers serving rural areas. In most cases, for instance, schools are prohibited from entering into loan agreements and would not be able to generate revenues to repay the loan if they could. In addition, sometimes, the high costs associated with the provision of rural health care limits the feasibility of telemedicine loans as well. While universities and hospitals may look to the loan program for funding to construct or rehab buildings, the 10-year required repayment period proves too financially burdensome. The paradox is that – while telemedicine offers a means to reach the most isolated and poorest residents of the country – it does not always provide a means for cost recovery. This hearing, I hope, will help us set the stage to achieve this increased demand for investment and so – on behalf of USDA, I appreciate the opportunity to testify before this committee today and to bring into focus some of the rewards this program offers as well as some of the challenges it faces.

Thank you.